



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/777,018

02/05/2001

Roger N. Hastings

5236-000215

5479

7590
Harness, Dickey & Pierce
Suite 400
7700 Bonhomme
St. Louis, MO 63105

10/17/2007

EXAMINER

DIXON, ANNETTE FREDRICKA

ART UNIT

PAPER NUMBER

3771

MAIL DATE

DELIVERY MODE

10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/777,018

Applicant(s)

HASTINGS ET AL.

Examiner

Annette F. Dixon

Art Unit

3771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 3771

DETAILED ACTION

1. This Office Action is in response to the Appeal Brief filed on July 12, 2007.

Examiner acknowledges claims 34-44 are pending in this application, with claims 1-33 having been cancelled.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 34-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Gabriel (6,173,199).

As to Claims 34, 35, and 39, Gabriel discloses an atherectomy device comprising: a catheter (10) having a proximal end (the portion of the device closest to element 72) and a distal end (14) and a lumen (40) there between; a support structure (46) in the lumen adjacent to the distal end; one or more optical conduits (66) in the catheter (10), each having a distal end supported by the support structure (46); one or more magnetic members (44) disposed in the distal end (14) of the catheter whereby the distal end (14) is oriented by one or more magnetic members (44) that align relative to the direction of an externally applied magnetic field (via element 48); and wherein the

Art Unit: 3771

one or more optical conduit (66) in the distal end are rotatable within the support structure. Regarding the optical conduit limitation, Gabriel discloses element 56 may provide an audio, visual or tactile indication to the user. (Column 6, Lines 49-53). Inherently, this visual indicator serves as an optical conduit. Further, Gabriel discloses the fiber optics may be utilized in the catheter. (Column 7, Lines 62-64). Regarding the rotatable limitation, Gabriel discloses the optical conduit (66) may be wrapped around the stylet (68) and the stylet (68) is removable from the catheter (10). (Column 7, Lines 20-34 and Column 9, Lines 13-14). Regarding the position of the support structure within the lumen, Gabriel discloses the lumen (40) and the support structure (46) are in fluid communication and the support structure (46) are within the lumen (40). (Figure 4 and Column 5, Line 42-45).

As to Claims 36 and 41, Gabriel discloses the magnetic members (44) are disposed within the support structure (46). (Figure 4).

As to Claim 37, Gabriel discloses the support structure (46) acts as a sheath for the catheter (10). (Figure 4).

As to Claims 38 and 40, Gabriel discloses the atherectomy device may be utilized for laser ablation. (Column 9, Lines 14-31).

As to Claim 42, Gabriel discloses the use of a guide wire (68) within the support structure (46).

As to Claim 43, Gabriel discloses the optical conduit (66) is connected to an optical imaging system, inherent to the ability of the conduit to select the position of the

Art Unit: 3771

device, and at least one optical conduit (66) is connected to a remote optical laser energy source (58). (Column 7, Lines 62-64).

As to Claim 44, Gabriel discloses the fiber optics may be utilized in the catheter for selecting the position of the distal end of the catheter. (Column 7, Lines 62-64).

Response to Arguments

4. Applicant's arguments, see Appeal Brief, filed July 12, 2007 with respect to the rejection(s) of claim(s) 34-44 under Ueda et al. (5,681,260) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gabriel (6,173,199). Examiner apologizes for any inconveniences incurred by the Applicant during the prosecution of this application.

Conclusion

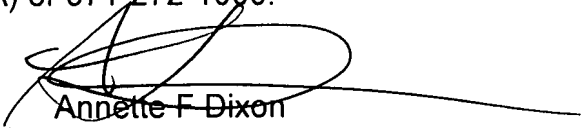
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Linhares et al. (6,030,377) and Ben-Haim et al. (6,171,303).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette F. Dixon whose telephone number is (571) 272-3392. The examiner can normally be reached on Monday thru Friday.

Art Unit: 3771

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Annette F. Dixon
Examiner
Art Unit 3771



JUSTINE R. YU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700